

REMARKS

General:

Claims 21-26 are pending in this application. Claims 21-26 stand rejected. Claim 21 is canceled. Claims 22 and 23 are rewritten in independent form. Claim 26 is amended.

No new matter has been added by this amendment.

Specification:

The abstract was objected to as being “in claim format” and containing “legal phraseology.” The grammar in the abstract is now narrative in form. The words “comprising” and “means” have been removed. The abstract is now believed to be proper.

35 U.S.C. § 112:

Claim 23 stands rejected on the ground that it “is not clear how the leaf bending element comprises at least one tapered screw. It appears that the leaf bending element has a tapered portion engaging a tapered portion of the screw head.” The rejection is not understood. Claim 23, as rewritten including language from claim 21, from which claim 23 was previously dependent, defines the leaf bending element as “adjustable within the isolating channel.” In the embodiments, the isolating channel can be recognized as groove 42 or slot 84, 86, 88. The element adjustable within groove 42 or slot 84, 86, 88, which thus embodies the leaf bending element, is taper headed screw 48, 90. The recitation in claim 23 that “the leaf-bending element comprises at least one taper headed screw” is correct.

Claim 23 further stands rejected on the ground that “straddling” is used in a sense different from a dictionary definition cited by the examiner. Another dictionary definition is “to stand or lie across or on both sides of (something),” which reads on the actual configuration, in which the threaded hole lies on both sides of the isolating channel, and the isolating channel lies on both sides of the threaded hole. As the Federal Circuit has recently explained in *Phillips v. AWH Corp.*, 75 USPQ2d 1321 (Fed. Cir. *in banc* 2005), when interpreting claim terms it is important to “look at the ordinary meaning in the context of the written description” and to avoid “the adoption of a dictionary definition entirely divorced

from the context.” The term “straddle” occurs in the written description at page 4, line 29 and page 6, line 1. In each case, a threaded hole is described as “straddling” a groove or slot, where a diameter of the threaded hole extends across the narrow dimension of the slot, with parts of the threaded hole forming threaded channels in the opposite walls of the slot. It is respectfully submitted that, when the term “straddle” is interpreted in the context of the written description, it is both clear and correct.

35 U.S.C. § 102:

Claims 21, 22, and 26 stand rejected as anticipated by U.S. Patent No. 2,503,951 (Kelly et al.).

Claim 21 is canceled.

With respect to claim 22, the examiner argues that the tapered bore 18 in Kelly is part of the isolation channel and that “each side of the taper is inclined towards a recess of the opposite side.” However, that is not what claim 22 says. Claim 22 recites that “*the isolating channel* is inclined at a shallow angle *to approach the recess* in a direction away from an open end of the isolating channel,” emphasis added. By looking at one side of the taper, and not at the channel as a whole, the examiner misinterprets the claim. As is clearly shown in the examiner’s sketch, the tapered channel 18 is nearest to the associated recesses at the open end of the tapered channel, and further from each of the associated recesses at the end away from the open end. There is no disclosure or suggestion in Kelly of an isolating channel that is inclined to approach the recess in a direction away from the open end of the isolating channel. Claim 22 is therefore believed to be both new and non-obvious over Kelly.

Claim 26 is amended to recite features similar to the features of claim 23 discussed below, and is deemed to be new and non-obvious for the same reasons as claim 23.

35 U.S.C. § 103:

Claims 23, 24, and 25 stand rejected as obvious over Kelly in view of U.S. Patent No. 867,275 (Hunter).

Kelly shows a cylindrical cutter, with several axial flutes 15 extending axially along the cylindrical outer face. Each flute 15 receives a tooth segment 20. In Fig. 5, the flutes are of dovetail cross section, and the tooth segments must be inserted axially. Between two adjacent flutes 15 is an axial slot 17 passing through an axial tapered bore 18. A tapered pin 19 is driven into each tapered bore 18 to spread the metal of the cutter apart and clamp the tooth segments in the flutes 15. The tapered pin 19 extends the entire length of the bore 18 and, as far as can be determined from the hidden detail in Fig. 2, engages the tapered bore over the entire length of the cutter. That ensures that the tooth segments are gripped uniformly over their entire axial length.

Hunter describes a circular saw with teeth 7 seated in sockets 3. The teeth are inserted radially, and are secured by keys 8, 8' against axial displacement. Tapered slots 14 are provided between adjacent sockets 3. The tapered slot 14 has a threaded socket 14' in the inner end. A tapered pin 15 with a threaded tip is screwed into the socket 14' and tightened to spread the metal of the saw blade and clamp the teeth 7 in the sockets 3.

The examiner points out that Kelly shows some features recited in claims 23 to 25, and Hunter shows other features recited in claims 23 to 25, and says that "therefore" it would have been obvious to replace Kelly's tapered pin with Hunter's taper-headed screw "for the purpose of having a positive engagement between the screw and the tool body (the pin may have the tendency to pull out)."

The examiner is respectfully reminded that in order to establish a *prima facie* case of obviousness, a suggestion or motivation to combine the references must be found *in the prior art*. See MPEP § 2142-2143, citing to *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). There is no suggestion in Kelly that the pin 18 may have a tendency to pull out. Given the considerable length, and consequent very slight taper, of Kelly's pins, it is highly unlikely that they would tend to pull out. There is no suggestion in Hunter that the screw thread is intended to prevent, or does prevent, the pins 15 from pulling out. Hunter's specification is entirely consistent with the assumption that the screw thread 14' is intended simply to assist in driving the wedges 14, 15 along one another. Absent any suggestion in either Hunter or Kelly that Hunter's construction would address a problem present in Kelly's


device, there would have been no motivation to combine them except through hindsight based on the present invention.

In addition, even if a person of ordinary skill in the art were to have considered combining Kelly and Hunter, there is no reason to expect that a structure in accordance with the present invention would have resulted. Kelly's cutter wheel has considerable axial length, and tooth segments 20 the axial length of which is their greatest dimension. Kelly's pins 18 extend and move axially, and have a small angle of taper. The plain-tapered pin of Kelly, which provides a uniform pressure over the entire axial length of the tooth segments, is well suited for Kelly's purpose. Hunter's saw blade, in contrast to Kelly's is thin in the axial direction. Hunter's pin 15, in contrast to Kelly's is designed to generate pressure essentially at a single location. Hunter's pin would not be suitable for use in Kelly's device, because Hunter's pin could not generate the uniform pressure that Kelly's device relies on. The examiner's proposal to substitute Hunter's screw tipped pin 15 would not be satisfactory, because it would result in a device both more complicated and less good than Kelly's. For this reason also, it is believed that claims 23-25 would not have been obvious over the cited references.

Respectfully submitted,

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